United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N	ID0000038	130918	C	R	2

Remarks

21 ____ 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
67 100 69	70 4	71 N	72 N	73 ____ 74 75 ____ 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Independent Meat Co.
2072 Orchard Drive East
Twin Falls, ID 83301

Entry Time/Date	Permit Effective Date
10:00am 9/18/2013	07/03/1978
Exit Time/Date	**Permit Expiration Date**
11:51 am 9/18/2013	07/03/1983; Admn Cont

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

Rob Stephens, President and Plant Manager (208) 777-0980
Patrick Florence, CEO " "
Mike Marsing, Maintenance Manager " "

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*

SIC: 2011

NAICS: 311611

Name, Address of Responsible Official/Title/Phone and Fax Number

Rob Stephenss, President/Plant Manager (208) 777-0980
email: robstephens@fallsbrand.com

Contacted ☑ Yes ☐ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

✓ Permit	☐ Self-Monitoring Program	☐ Pretreatment	☐ MS4
✓ **Records/Reports**	☐ Compliance Schedules	☐ Pollution Prevention	
✓ Facility Site Review	☐ Laboratory	☐ Storm Water	
✓ Effluent/Receiving Waters	✓ Operations & Maintenance	☐ Combined Sewer Overflow	
✓ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes SEV Description

RECEIVED
DEC 16 2013
Inspection & Enforcement Management Unit (IEMU)

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Patrick Stoll	EPA/R10/IOO (208) 378-5772	9/23/2013
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date
		12/16/13

EPA Form 3560-3 (Rev 1-06) Previous editions are obsolete.

ICIS (per advance copy)
9-25-2013 JBrown

National Pollutant Discharge Elimination System (NPDES)
Inspection Report

Independent Meat Co.
2027 Orchard Drive East
P.O. Box EE
Twin Falls, Idaho 83303

NPDES Permit # ID0000388

Inspection date: September 18, 2013
Report completion date: December 9, 2013

Prepared by:

Patrick Stoll
U.S. Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Inspection and Enforcement Management Unit
Idaho Operations Office

Table of Contents

I. Facility Information

Facility Name:	Independent Meat Co.
NPDES No.:	ID0000388 Effective date: July 3, 1978 Expiration date: July 3, 1983; admin continued
Facility Contact(s):	Rob Stephens, President Phone: (208) 733-0980 Email: robstephens@fallsbrand.com Patrick Florence, C.E.O. Phone: (208) 733-0980 Email: florencepatrick@hotmail.com Mike Marsing, Maintenance Manager Phone: (208) 733-0980 Email: fallsbrand@yahoo.com
Facility Type:	Meat processing and packing SIC code 2011 – "Meat Packing Plant" NAISC code 311611 – "Animal Slaughtering"
Facility Location:	2027 Orchard Drive East Twin Falls, ID 83303 Map coordinates: 42.533855 / -114.444842
Mailing Address:	P.O. Box EE Twin Falls, ID 83303
Permitted Outfall Location:	Outfall 001: 42.53225 / -114.44646

II. Inspection Information

Inspection Date(s):	September 18, 2013
Inspector(s):	Patrick Stoll, Inspector EPA Region 10/OCE/IEMU/IOO (208) 378-5772
Entry Time: Exit Time:	10:00 am 11:51 am

Weather Conditions:	60-65° F, sunny and breezy
Receiving Waters:	Rock Creek (a tributary of the Snake River)
Purpose:	Evaluate the compliance status with respect to the facility's NPDES individual discharge permit

III. Facility Background

From the company web site: *Independent Meat Company has been selling and processing meat since 1904. Our company is family owned and has moved into the fourth generation. We service accounts with both retail and foodservice product throughout the continental United States and several foreign countries. Falls Brand, Old Fashioned Recipe and Salmon Creek Farms Natural Pork products are manufactured at our plant in Twin Falls, Idaho. Fresh pork is sold and distributed to our core markets by Independent Distribution Company. Independent Meat manufacturing division supplies branded and private label products to wholesale distributors and retail warehoused throughout the U.S. and Pacific Rim.*

Independent Meat Company (IMC) is located in an industrialized area on the south side of Twin Falls, Idaho. The facility is situated on a bluff approximately 365 feet from the north bank of Rock Creek. At the time of this inspection, IMC reportedly employed 235 individuals.

IMC utilizes a commercial ammonia refrigeration system for cold storage purposes at the meat processing and packaging facility. The system uses shell-and-tube water-cooled condensers (five vertical towers – see Photo 6) to transfer the latent heat from the vaporized refrigerant in the closed-circuit refrigeration system to the cooling water flowing through the condenser; there is no direct contact between the refrigerant side and the cooling water side of the system (water in the refrigeration system would, in fact, cause the system to fail). The cooling water is pumped from a "seep tunnel" – a horizontal tunnel constructed years ago in the native basalt, 20-30 feet below the surface, to provide for drainage of the farmland above. The tunnel mouth is located in the basalt cliffs on the south side of Rock Creek across from IMC. There is a continuous high-volume discharge of water from the tunnel to Rock Creek. As reported by IMC staff, the Idaho Department of Water Resources has issued a permit to IMC authorizing the withdrawal of up to 600 gallons per minute (GPM) of water from the seep tunnel for use in the water-cooled condensers. Cooling water is pumped from the tunnel, through a flow meter, across Rock Creek, to and through the condenser towers located at the rear of the IMC facility and, finally, to the NPDES permitted outfall (Outfall 001) where it is discharged to Rock Creek. According to IMC staff, the withdrawal of water from the seep tunnel seldom exceeds 300 GPM. The daily average is reported to be between 250 and 300 GPM.

The non-contact cooling water discharge described above is the only permitted discharge at IMC. The current permit became effective on July 3, 1978 and expired on July 3, 1983. The permit has been administratively extended since that time. The permit requires monthly monitoring for both flow and temperature but only imposes an effluent limit on temperature (80° F).

IV. Inspection Entry

This was an announced inspection with less than 24 hours advanced notice. I contacted IMC late the afternoon of September 17, 2013. I was eventually put in touch with the facility C.E.O., Patrick Florence. Mr. Florence told me that the best person for me to meet with would typically be IMC President Rob Stephens. Unfortunately, Mr. Stephens was apparently attending meetings in Salt Lake City. Mr. Florence agreed to meet with me and to do his best to answer all my questions.

I had originally invited Joseph Otero, Associated Engineer with the Idaho Department of Environmental Quality (IDEQ), to accompany on this inspection. Mr. Otero called me at approximately 9:15 am the morning of the inspection to tell me that he had a conflict and would not be able to join me.

I arrived at IMC at 10:00 the morning of September 18, 2013 and met with Mr. Florence in his office. Since the permitted discharge was directly associated with IMC's ammonia refrigeration system, I made a request to include the facility maintenance manager in the meeting as well. Mr. Florence then summoned maintenance manager Mike Marsing to the meeting. After introducing myself to Mr. Marsing and presenting my inspector credentials to both Mr. Florence and Mr. Marsing, I began to explain the reason for my visit. Shortly thereafter, IMC President Rob Stephens entered the room. I introduced myself to Mr. Stephens and again presented my inspector credentials. At that time we moved to a larger meeting area where I explained the purpose and scope of the inspection.

Unless otherwise noted, the information contained in this report was provided by the three IMC staff members noted above.

V. Purpose and Scope of the Inspection

I explained to the IMC staff that the purpose of the inspection was to evaluate the facility's compliance with respect to the conditions and requirements outlined in the facility's NPDES permit. To achieve this goal, the scope of the inspection would include the following elements:

1. An opening conference during which time IMC could provide me with an overview of facility operations in general, describe any changes to facility

operations (including discharges) since the last inspection, and address specific questions involving the ammonia refrigeration system and the non-contact cooling water discharge to Rock Creek.
2. A tour of the facility operations including a review of the ammonia refrigeration system (including the water-cooled condensers), the cooling water intake area (the seep tunnel), and the discharge location at Outfall 001.
3. A review of the instruments used to monitor the flow and temperature of the discharge to Rock Creek, the calibration procedures and associated records for the instruments, and the bench sheets or log used to record the data.
4. A closing conference to summarize observations and any issues noted during the inspection.

VI. Opening Conference

During the opening conference I learned that the basic operations at the IMC facility have changed little over the years. The only discharge from the facility to the waters of the United States continues to be the permitted discharge at Outfall 001. As in the past, this discharge is limited to the non-contact cooling water associated with the facility's ammonia refrigeration system. Additional background information acquired during the course of the opening conference included the following:

1. The nature of the "seep tunnel".
2. The design of the water-cooled refrigeration condenser – the condenser is composed of a row of five separate vertical towers; each tower can be replaced individually if necessary.
3. The flow rate for the non-contact cooling water ranges from 250-300 GPM.
4. The temperature differential between the water entering the top of the water-cooled condenser towers and the water exiting the base of the towers is approximately 10-12°F.
5. IMC does not add any scale inhibitors or other treatment chemicals to the non-contact cooling water (in decades past, a since-restricted water treatment chemical [zinc chromate?] was reportedly used to inhibit scale formation within the condenser's water tubes).
6. The condenser towers require semi-annual cleaning. Cleaning is a physical process that does not involve any cleaning chemicals. Cleaning is likely to result in some discharge of CaCO3 to Rock Creek.
7. Mr. Marsing (the maintenance manager) indicated that there has never been a leak between the refrigerant side and the cooling water side of the refrigeration system (a leak would have introduced ammonia/NH3 into the cooling water).
8. The total amount of ammonia at the facility at any one time is approximately 4200 pounds.
9. The non-contact cooling water discharged from the base of the cooling towers is collected in a concrete tank located directly below the towers; water flows from this tank (gravity flow) to the discharge location at Outfall 001.
10. The discharge temperature of the non-contact cooling water is measured in the concrete tank below the cooling towers.

11. A digital thermometer is used to measure the temperature of the water in the collection tank below the towers.
12. IMC is required to monitor the temperature at which meat is processed and stored on a regular basis; for this reason, a number of digital thermometers are available and used daily throughout the facility.
13. IMC performs a daily calibration of the digital thermometers; the temperature sensing component of the thermometers is inserted in ice along with a reference thermometer as part of the calibration process (see Photo 8).
14. One of the calibrated digital thermometers is used to measure the discharge from the water-cooled condenser on a weekly basis (no single thermometer is dedicated for this purpose).
15. The flow rate for the non-contact cooling water is measured with a ***McCrometer*** propeller-driven flow meter. The meter is mounted in-line on the discharge line from the pump that draws water from the seep tunnel and pumps it to the water-cooled condenser (see Photo 3).
16. There is currently no practical way to calibrate or test the accuracy of the flow meter without shutting down the facility's refrigeration system (unless some type of bypass is installed). The meter would most likely need to be sent to the manufacturer for testing. At the time of this inspection, it was reported that the existing meter had not been calibrated since its installation.
17. Temperature and flow data is collected on a weekly basis; the monthly average for each parameter is reported on the monthly discharge monitoring reports submitted to both EPA and IDEQ (the bench sheets recording the weekly data are included as well).

VII. Facility Tour

Upon conclusion of the opening conference, I requested a tour of various portions of the IMC facility. I began with a brief visit to the equipment room where the digital thermometers are calibrated and stored. After that, Mr. Stephens and Mr. Marsing led me on a tour of the mechanical room where the refrigeration compressors are located (along with other ancillary equipment) and showed me the water-cooled condenser towers located outside of the mechanical room (see Photo 6).

Mr. Stephens then drove me to the area below the facility where I was able to observe the discharge from the IMC facility to Rock Creek (on the north side of the stream) and the seep tunnel, pump, metering, and piping system on the opposite side used to deliver the non-contact cooling water to water cooled condenser (see Photos 2-7)

VIII. Areas of Concern

The only area of concern noted during the course of this inspection involved the inherent difficulty associated with any effort to evaluate the accuracy of the current system used for measuring the flow rate of the discharge from IMC to Rock Creek. In its current configuration, it would be very disruptive to IMC's basic operations to

remove the flow meter to have it tested and/or calibrated. Quoting from Part 6.A. (***Evaluation of Permittee's Flow Measurement***) of the U.S. Environmental Protection Agency's ***NPDES Compliance Inspection Manual***, July 2004 edition:

> *To comply with the permit requirements established under the National Pollutant Discharge Elimination System (NPDES), the permittee must accurately determine the quantity of wastewater being discharged (*from ***Objectives and Requirements***).

The current NPDES permit applicable to IMC's wastewater discharge does not include a specific calibration schedule for the flow meter used to measure and monitor the discharge. Despite this omission from the existing permit, it is clearly EPA's intent that these types of instruments should be calibrated at least once a year. Quoting once again from Part 6.A. of the ***NPDES Compliance Inspection Manual*** (from ***Evaluation of Facility-Installed Flow Devices and Data***), it is noted that the inspector should do the following:

> *Review and evaluate calibration and maintenance programs for the discharger's flow measurement system. The permit normally requires the facility to check the calibration regularly by the permittee. The facility must ensure that their flow measurement systems are calibrated by a qualified source at least once a year to ensure their accuracy. Lack of such a program is considered unacceptable for NPDES compliance purposes.*

As noted previously, IMC personnel indicated that the current flow meter has never been calibrated. In a follow-up conversation I had with Mr. Marsing, I learned that the current flow meter has been in place for approximately 2-3 years.

IX. Closing Conference

After completing the facility tour, I met with Mr. Stephens and Mr. Florence back at the IMC main building. During our meeting, I noted that I had not observed any obvious NPDES compliance issues during the course of the inspection. I did express concerns about the inability to easily test and/or calibrate the closed channel, in-line meter used to measure the flow of the non-contact cooling water discharged to Rock Creek. Mr. Stephens indicated that it might be possible to install a manifold or bypass system that would include a second flow meter so either meter could be taken off-line (at separate times) for calibration and maintenance.

Upon conclusion of the closing conference, I thanked the IMC staff for their time and invited them to contact me if they had any future questions about the inspection.

Independent Meat Co.
Twin Falls, Idaho

Report Completion Date: 12/09/2013

Inspector:

Patrick Stoll, EPA/R10/IOO
Lead Inspector

Independent Meat Co. – Compliance Evaluation Inspection
September 18, 2013 – Photo Log

Inspection site or facility name:	Independent Meat Co.
Physical Location:	2027 Orchard Drive East Twin Falls, Idaho 83303
NPDES ID #:	ID0000388
Type of Inspection:	Compliance Evaluation Inspection
Date of Inspection:	September 18, 2013
Inspector(s):	Patrick Stoll, EPA/R10/IOO
Image capture device:	Panasonic Lumix DMC-TS4
Location where original/archived images are stored:	Shared Drive: CDBS > APPS > OCE > IEMUnit > Stoll > NPDES_Individual> IMC > IMC_Archive_Photos
Original file type, pixel dimensions, and file #s, (assigned by camera):	JPG; 4000 x 3000 pixels; Image numbers P1000200 through P1000213
Folder name for resized images and pixel dimensions (for use in Photo Log):	IMC_LowRes ; 800x600 pixels
Photo Log Image ID #s:	Images numbered: 1-9
Digital images recorded by:	Patrick Stoll unless otherwise noted
Drainage/flow direction:	→

Independent Meat Co.; Twin Falls, Idaho
Compliance Evaluation Inspection; September 18, 2013

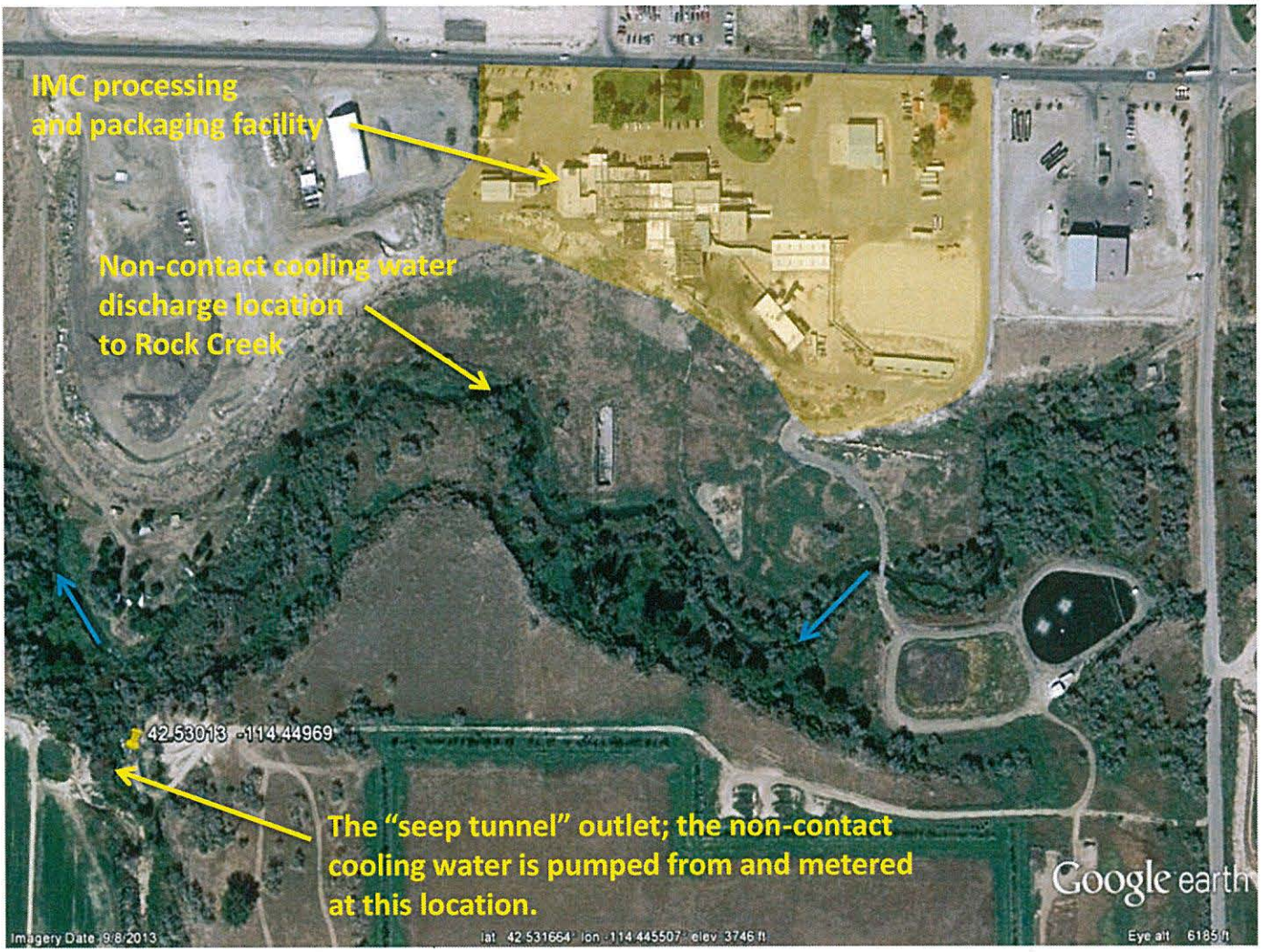


Photo No. 1 – from Google Earth Pro (imagery date 09/08/2013)
An aerial view of the Independent Meat Co (IMC) facility and Rock Creek

Photo No. 2 (P1000211)
A centrifugal pump draws water from the seep tunnel and pumps it across Rock Creek to the water-cooled condenser located at the rear of the IMC facility.

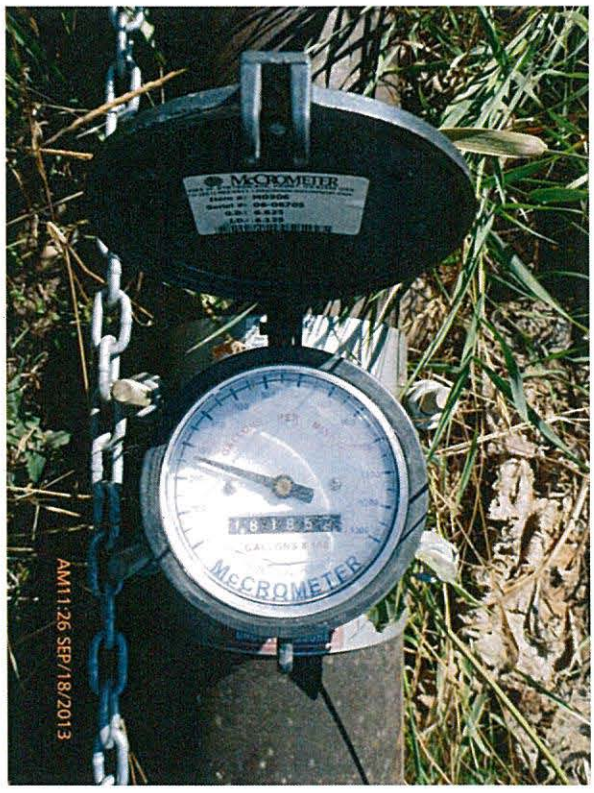
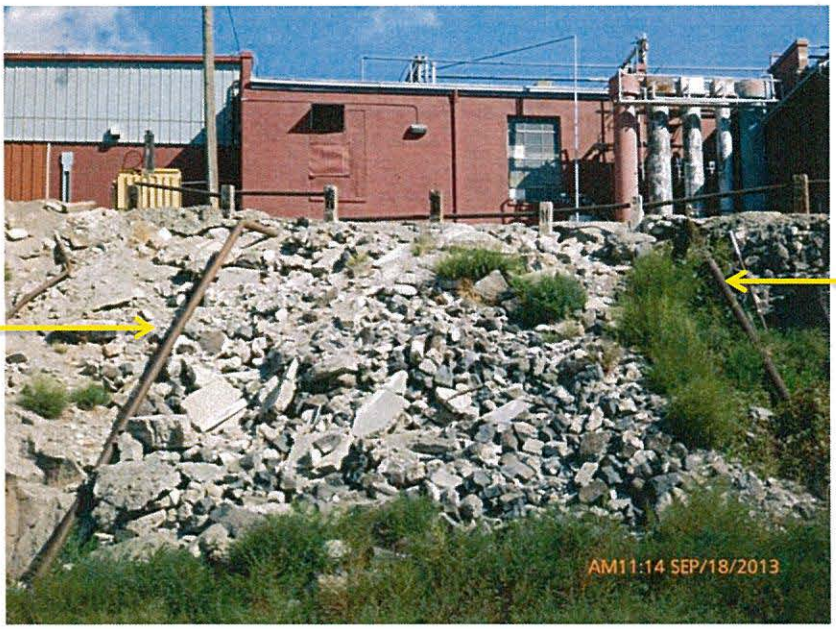


Photo No. 3 (P1000212)
This flow meter is installed in the discharge line above the pump identified in Photo 2.

Photo No. 4 (P1000204)
Facing south from below and behind the IMC facility, the pipe conveying cooling water from the seep tunnel to the intake side of the water-cooled condenser can be observed where it spans Rock Creek.

Effluent line from the water cooled condenser to discharge location at Rock Creek



Influent line to the water cooled condenser

Photo No. 5 (P1000209)
Looking north from the area below the IMC facility, the influent and effluent lines transporting the non-contact cooling water are clearly visible.

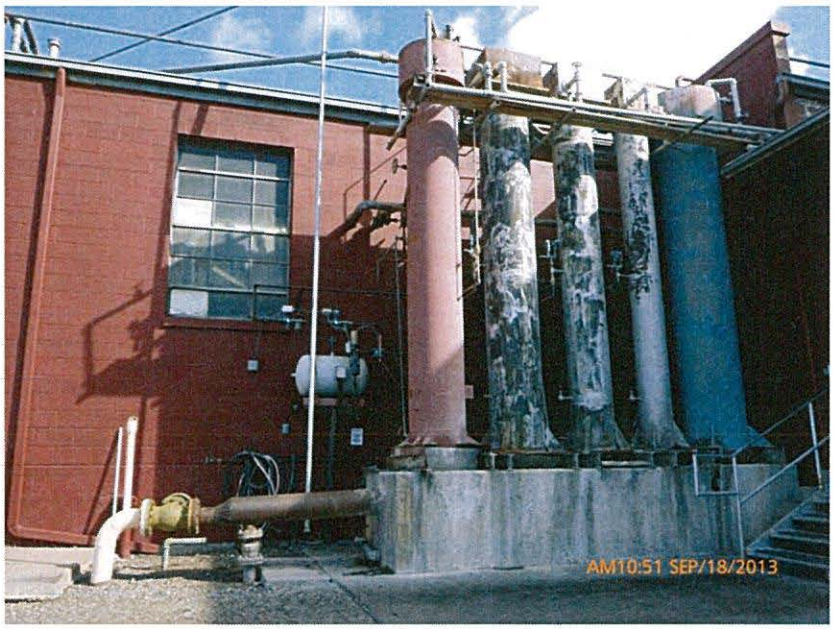
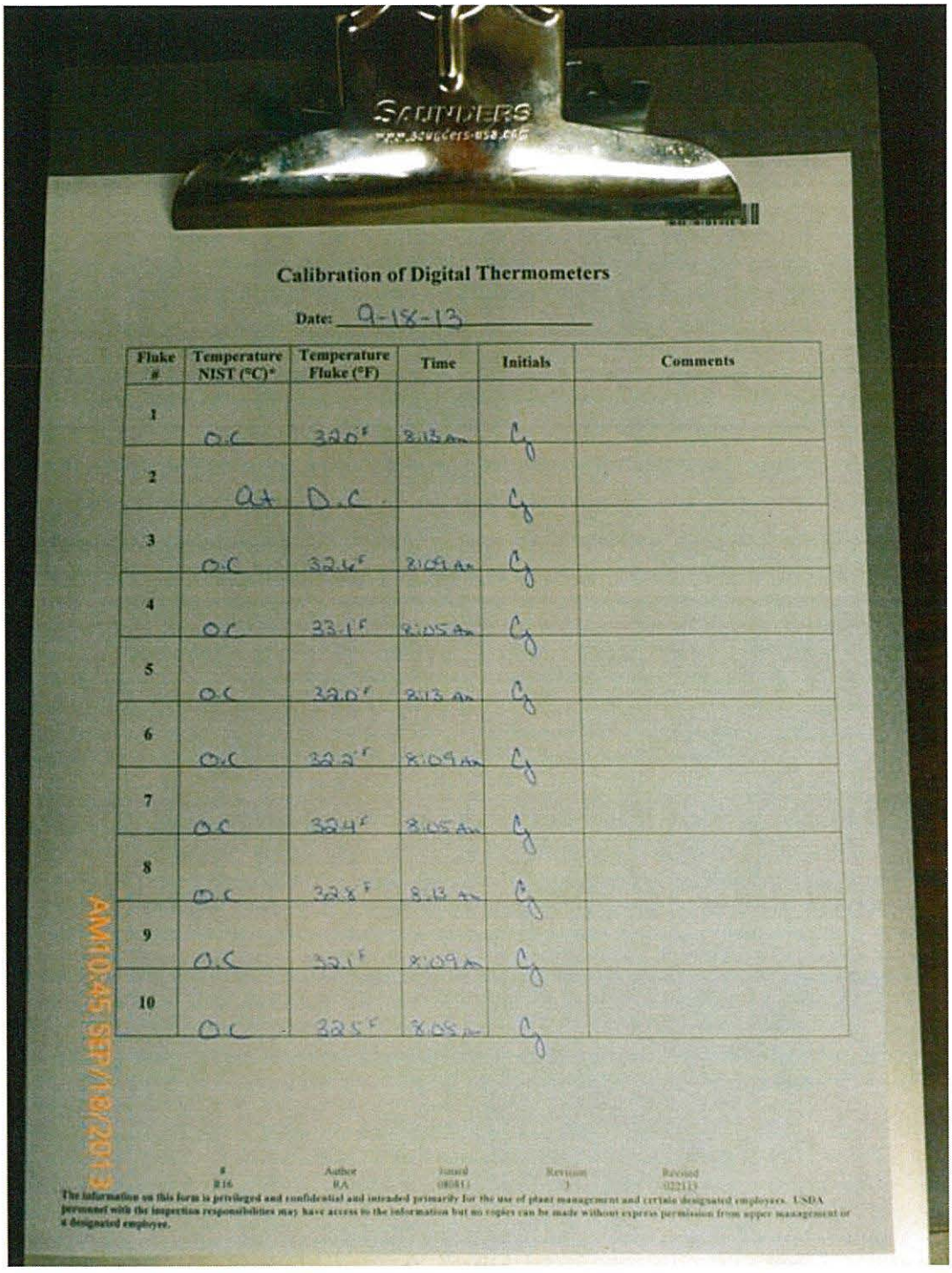


Photo No. 6 (P1000203)
Cooling water enters the top of the five-tower water cooled condenser and flows from the cement tank at the bottom.

Photo No. 7 (P1000206)
The non-contact cooling water flowing from the water cooled condenser is discharged to Rock Creek at this location.

Photo No. 8 (P1000202)
The digital thermometers at IMC are calibrated on a daily basis.



Fluke #	Temperature NIST (°C)*	Temperature Fluke (°F)	Time	Initials	Comments
1	0°C	32.0°	8:13 AM	CJ	
2	0°C	0.C		CJ	
3	0°C	32.6°	8:09 AM	CJ	
4	0°C	33.1°	8:05 AM	CJ	
5	0°C	32.0°	8:13 AM	CJ	
6	0°C	32.2°	8:09 AM	CJ	
7	0°C	32.4°	8:05 AM	CJ	
8	0°C	32.8°	8:13 AM	CJ	
9	0°C	32.1°	8:09 AM	CJ	
10	0°C	32.5°	8:05 AM	CJ	

#	Author	Issued	Revision	Revised
R16	RA	080411	3	022113

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Photo No. 9 (P1000200)
Calibration of the digital thermometers at IMC is recorded on a daily log sheet.